

## AMENDMENT TO THE SPECIFICATION

Please amend the paragraph beginning at page 7, line 15, as follows:

According to an aspect of the invention relevancy determination unit 2 is also operable to receive flow estimate information from flow estimating unit 410 and time zone information from time zone unit 412. Time zone estimation unit 412 and flow estimation unit 410 may be coupled to various agents, such as agents 24, 26 27 and 28, but this is not necessarily so.

Please amend the paragraph beginning at page 9, line 17, as follows:

Retrieval means ~~43~~ 6 includes a plurality of agents or receptors, such as agents 24, 26 27 and 28. Said agents are coupled to various information sources, such as information sources 30-36 via networks or via media. Agents 24, 26 27 and 28 are adapted to receive information from various information sources, such as television channel 30, radio channel 31, news provider 32, web sites 33, IRC servers 34, bulletin boards 35 and streaming media provider 36, and provide information packets to analysis means 5. For example, agent 24 receives television broadcasts or video streams via cable network 37 and converts the television broadcast or video stream to a stream of information packets. Agent 24 can include of a dedicated encoder, a device for extracting clause caption out of said video stream or picture recognition and analysis means. Agent 27 receives radio broadcasts, transmitted by radio channel 31 over a wireless media, and convert said transmitted audio stream to a stream on information packets. Agent 28 is coupled, via a network to news provider 32, web sites 33, IRC servers 34, bulletin boards 35 for retrieving information packets transmitted from said information sources via network 38. Retrieval means 6 further including of retrieval management and prioritization component 29 for prioritizing content sources and channels and for balancing the load between agents/receptors.

Please amend the paragraph beginning at page 10, line 27, as follows:

Classification module ~~24~~ 25 is adapted to dynamic classification of information streams/groups of information packets. Classification module ~~24~~ 25 dynamically determines a topic of a channel; thus allowing searches and alerts based upon a topic an information stream.

Please amend the third paragraph at page 15, as follows:

Relevancy determination unit 2 has a plurality of interfaces, such as first interface 405 for receiving information from search engine 26, second interface 406 for receiving information from alert module 3, fourth interface ~~507~~ 407 for receiving information from time zone unit 412 and fifth interface ~~508~~ 408 for receiving information from flow estimation unit 410. Relevancy determination unit 2 also has processor ~~403~~ 400 for calculating current reception patterns and previous reception patterns in response to the reception of information relating to the reception of relevancy keywords and a storage unit 404, coupled to the first interface and the processor, for storing current reception patterns, previous reception patterns and information relating to the reception of relevancy keywords. Storage unit 404 stores relevancy keyword table 402

Please amend the paragraph beginning at page 17, line 12, as follows:

In a periodical manner, the content of relevancy keyword table 402 is scanned and processed by processor ~~403~~ 400 to update the relevancy statistics. The relevancy statistics are responsive to flow statistics, as being provided by flow estimation unit 410. Preferably, the flow statistics are provided by either alert module 3 or search engine 26 that filter out (and at the same time update relevancy determination unit 2) frequently used words.

Please amend the paragraph beginning at page 19, line 8, as follows:

The messages from the various channels are retrieved by retrieval means 6 and eventually provided to alert module ~~6~~ 3. The messages are received by Messages Coordinator Module 50 for processing. The messages transferred consist of control data such as channel ID, Message ID, timestamp of the time of

arrival, and information content such as a phrase, a sentence, a news item, a music item or a video item.

Please amend the paragraph beginning at page 33, line 9, as follows:

Fig. 4 illustrates various optional modules/portions of search engine 26, such as, but not limited to, query index 258, real time query indexing module 277, archive search module 253, semi-static database search module 254, query coordinator 261 query filter 264, message coordinator 250, message filter 251, terms filters 249 and 263. Search engine 26 has: Message Coordinator module 250, Message Filter module 251, Messages Buffer 252, Term Extractor modules 248 and 260 Terms Filter modules 249 and 263, ~~Real Time Search modules 257 and 277~~ Real Time Indexing module 257, Real Time Query Indexing module 277, Terms Index 256, future search module 259 for allowing a generation of alerts to a client system, queries Index 258, query and results manager 255 user communication modules 266, 268, and 270, queries coordinator 261, query filter module 264, archive search module 253, and semi-static database search module 254. Although no part of the Search Engine, for the clarity of the disclosure only, Users 265, 267, and 269 are shown connected to User Communication modules 266, 268, and 270. Query and results manager 255 matches query results to terms index 256 to generate query results. Query and results manager 255 matches alert criteria provided by future search module 259 to the content of terms index 256. Future search module also referred to as alert module 259. Although information packets will be referred to as messages, and information sources will be referred to as channels in the text of this document, it will be appreciated that in different embodiments of the present disclosure other sources of information could be used such as news channels, video channels, music channels, various Internet sites and the like. It will also be appreciated that in other embodiments of the present disclosure, the information packets processed could be in addition to text format in other diverse data formats such as streaming video, still pictures, sound, applets and the like.

Please amend the paragraph beginning at page 34, line 14, as follows:

Term Extractor ~~249~~ 248 receives the messages from Messages coordinator ~~248~~ 250, performs message parsing, and stemming (finding the lexicographic root) of the resulting terms. Once the message is parsed and stemmed, a list of terms within said message is created. The terms extracted are sent to further processing accompanied with identifying data such as channel ID, message ID and the message arrival time. Terms Filter 249 passes the terms through a series of filters, which can change or discard specific terms. For example, Terms Filter 249 can discard stop-words, frequently used words, one-character words, user-defined words, system-defined words such as "a", "about", "else", "this", and the like. According to an aspect of the invention the frequently user words are utilized for determining the flow characteristics of incoming data.

Please amend the paragraph beginning at page 41, line 12, as follows:

The operations supported by the Terms Index 256 of Fig. 4 will be described next. Terms Index 256 of Fig. ~~2~~ 4 supports three modes of operation: (1) term insertion, (2) terms deletion by message ID, and (3) term deletion by the garbage collection process.